

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : HITACHI LTD

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(72)Inventor : KOJIMA SUSUMU
HIRAMOTO MAKOTO
YOSHIDA SHINICHI

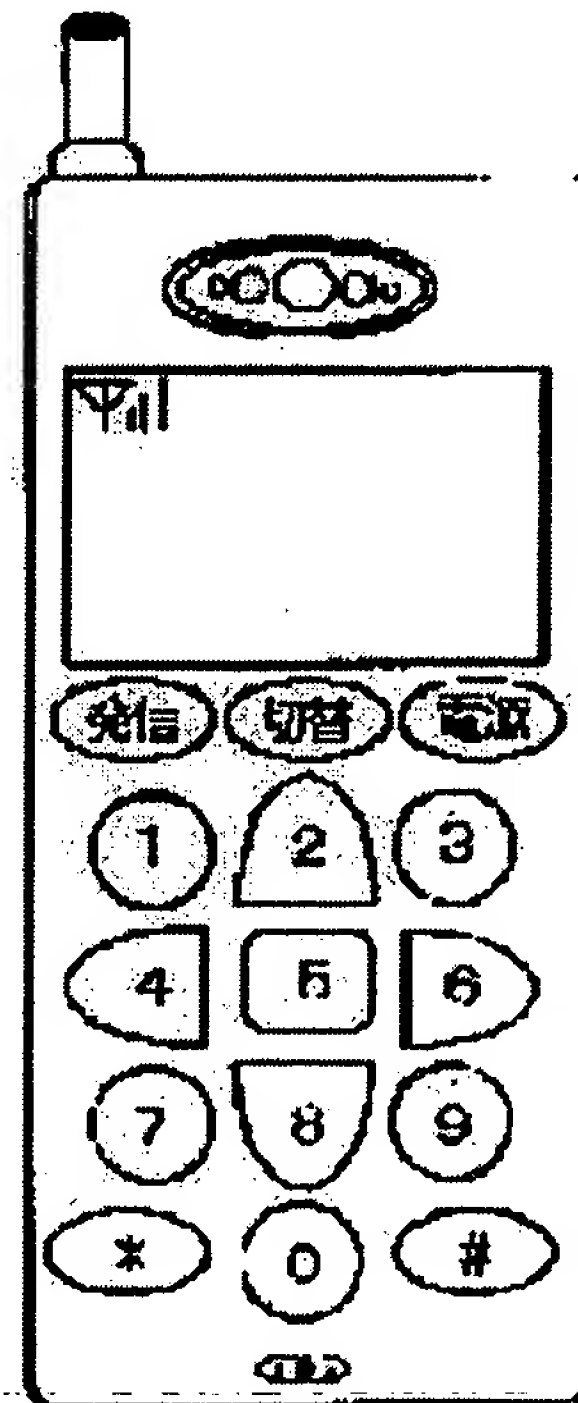
(54) TELEPHONE SET

(57)Abstract:

PROBLEM TO BE SOLVED: To enhance the operating convenience of the telephone set by using selectively a number entry key or a cursor movement key to reduce number of the keys thereby decreasing the opportunity of wrong operation of the user.

SOLUTION: The purpose of this invention is attained by providing a means that selects a means entering a telephone number or a means moving a cursor to the telephone set such as a portable telephone set. Number of keys of the telephone set is decreased by using the means that selects the means entering the telephone number or the means moving the cursor so as to select the number entry means or the cursor moving means.

Thus, the opportunity of wrong operation by the user is decreased and the telephone set itself is small-sized.



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the examiner's decision of rejection or
application converted registration]

[Date of final disposal for application]

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CLAIMS

[Claim(s)]

[Claim 1] Telephone characterized by having a means to input a number, and the means which changes the means to which cursor is moved in the telephone which has a means to input a number, and the means to which cursor is moved

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The field of the invention to which invention belongs] This invention relates to the key stroke approach in telephones, such as a cellular phone.

[0002]

[Description of the Prior Art] By telephone, such as the conventional cellular phone, a means to input a number, and the means to which cursor is moved were separately arranged as a key respectively.

[0003]

[Problem(s) to be Solved by the Invention] Since a means to input a number, and the means to which cursor is moved were separately arranged as a key respectively with the above-mentioned conventional technique, the number of keys increases and an operation mistake increases, it is user-unfriendly for a user.

[0004] Moreover, it was difficult for the number of keys to increase and to miniaturize the magnitude as telephone with the above-mentioned conventional technique.

[0005]

[Means for Solving the Problem] The above-mentioned technical problem is attained by having the means which changes a means to input a number into telephones, such as a cellular phone, and the means to which cursor is moved.

[0006] The number of keys passes and becomes fewer by using the means which changes a means to input this number, and the means to which cursor is moved, and changing a means to input this number, and the means to which cursor is moved. Therefore, a user's operation mistake can decrease and the magnitude as telephone can be miniaturized.

[0007]

[Embodiment of the Invention] Below, this invention is stated to a detail according to an example.

[0008] In drawing 1, (101) is the input section for choosing data utility information.

[0009] (102) is an input change control section by this invention.

[0010] (103) is a display.

[0011] (104) is an auxiliary storage unit which saves various data etc.

[0012] (105) is the number input section for inputting a number.

[0013] (106) is the cursor advance section for moving cursor.

[0014] One example of the telephone in this invention is shown in drawing 2. In this example, number input mode and cursor advance mode are changed using a "change" carbon button.

[0015] The example of a display of the display (103) at the time of number input mode is shown in drawing 3. On No. 1 of a display, it is displayed as the "figure" which shows number input mode.

[0016] The example of a display of the display (103) at the time of cursor advance mode is shown in drawing 4. On No. 1 of a display, the icon of the direction of a cross joint which shows a cursor advance is displayed.

[0017] Processing of the input change control section (102) by this invention is explained to drawing 5.

using a programming flowchart.

[0018] An input change control section (102) is called when a "change" key is pressed. First, as for an input change control section (102), input mode judges whether it is "0" (1021). Input mode is a variable saved at an auxiliary storage unit (104).

[0019] Input mode processes the number input section "0" cases (1022).

[0020] Then, "1" is set as input mode (1024).

[0021] Input mode processes the cursor advance section "1" case (1023).

[0022] Then, "0" is set as input mode (1025).

[0023] A programming flowchart is used for drawing 6 and processing of the number input section (105) is explained to it.

[0024] The number input section (105) performs input waiting of a key (1051).

[0025] When a key is pressed, the pressed key judges below in "9" more than "0" (1052-1053).

[0026] When the key pressed when a key was pressed is below "9" more than "0", the inputted number is displayed on a display (103) (1054).

[0027] When the pressed key is "*", "*" is displayed on a display (103) (1055-1056).

[0028] When the pressed key is "#", "#" is displayed on a display (103) (1057-1058).

[0029] The selected function is performed when other (1059).

[0030] A programming flowchart is used for drawing 7 and processing of the cursor advance section (106) is explained to it.

[0031] The cursor advance section (106) performs input waiting of a key (10601).

[0032] When a key is pressed, the pressed key judges below in "9" more than "0" (1062-1063).

[0033] When the key pressed when the key pressed when a key was pressed was below "9" more than "0" is "2", cursor is moved upwards (10604-10605).

[0034] When the pressed key is "4", cursor is moved to the left (10606-10607).

[0035] When the pressed key is "6", cursor is moved to the right (10608-10609).

[0036] When the pressed key is "8", cursor is moved downward (10610-10611).

[0037] The selected function is performed when the pressed key is not "*" or "#", either (10612-10614).

[0038]

[Effect of the Invention] According to this invention, since it can be used being able to change a number input key and a cursor movement key, the number of keys becomes fewer. Thereby, since a user's operation mistake decreases, user-friendliness improves. Moreover, the magnitude of telephone can also be miniaturized.

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TECHNICAL FIELD

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PRIOR ART

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TECHNICAL PROBLEM

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MEANS

[Means for Solving the Problem] The above-mentioned technical problem is attained by having the means which changes a means to input a number into telephones, such as a cellular phone, and the means to which cursor is moved.

[0006] The number of keys passes and becomes fewer by using the means which changes a means to input this number, and the means to which cursor is moved, and changing a means to input this number, and the means to which cursor is moved. Therefore, a user's operation mistake can decrease and the magnitude as telephone can be miniaturized.

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[Embodiment of the Invention] Below, this invention is stated to a detail according to an example.

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[0017] Processing of the input change control section (102) by this invention is explained to drawing 5 using a programming flowchart.

[0018] An input change control section (102) is called when a "change" key is pressed. First, as for an input change control section (102), input mode judges whether it is "0" (1021). Input mode is a variable saved at an auxiliary storage unit (104).

[0019] Input mode processes the number input section "0" cases (1022).

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[0025] When a key is pressed, the pressed key judges below in "9" more than "0" (1052-1053).

[0026] When the key pressed when a key was pressed is below "9" more than "0", the inputted number is displayed on a display (103) (1054).

[0027] When the pressed key is "*", "*" is displayed on a display (103) (1055-1056).

- [0028] When the pressed key is "#", "#" is displayed on a display (103) (1057-1058).
[0029] The selected function is performed when other (1059).
[0030] A programming flowchart is used for drawing 7 and processing of the cursor advance section (106) is explained to it.
[0031] The cursor advance section (106) performs input waiting of a key (10601).
[0032] When a key is pressed, the pressed key judges below in "9" more than "0" (1062-1063).
[0033] When the key pressed when the key pressed when a key was pressed was below "9" more than "0" is "2", cursor is moved upwards (10604-10605).
[0034] When the pressed key is "4", cursor is moved to the left (10606-10607).
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[0036] When the pressed key is "8", cursor is moved downward (10610-10611).
[0037] The selected function is performed when the pressed key is not "*" or "#", either (10612-10614).
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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram showing one example of this invention.

[Drawing 2] It is one example of the telephone in this invention.

[Drawing 3] It is an example of a display at the time of number input mode.

[Drawing 4] It is an example of a display at the time of cursor advance mode.

[Drawing 5] It is the processing flow of the input change control section by this invention.

[Drawing 6] It is the processing flow of the number input section.

[Drawing 7] It is the processing flow of the cursor advance section.

[Description of Notations]

101 [... An auxiliary storage unit, 105 / ... The number input section, 106 / ... Cursor advance section] ... The input section, 102 ... An input change control section, 103 ... A display, 104

[Translation done.]

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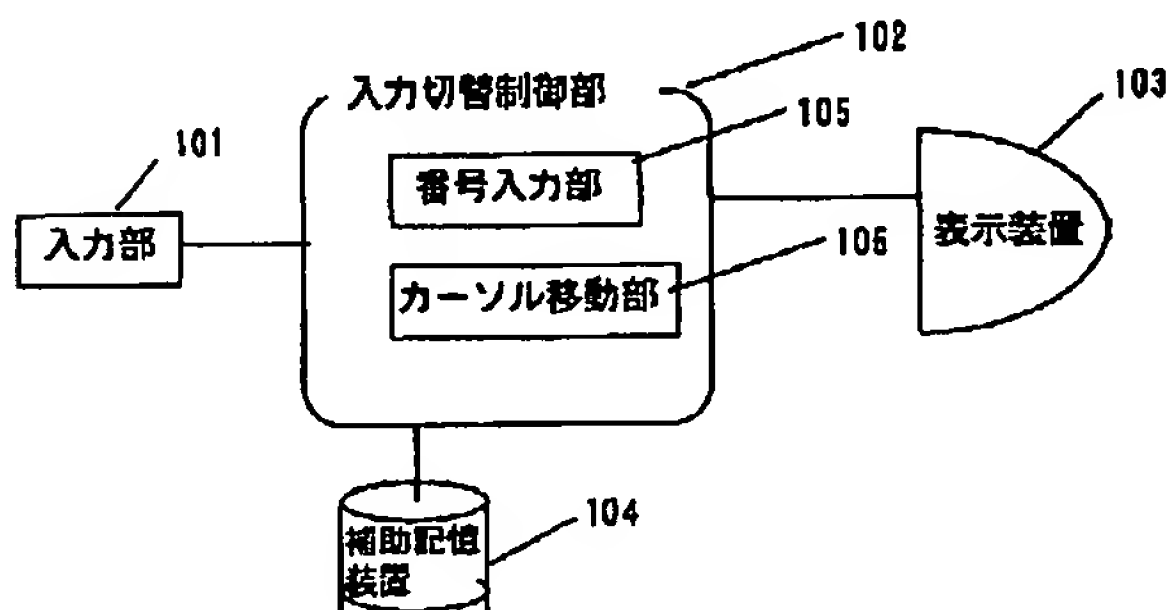
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DRAWINGS

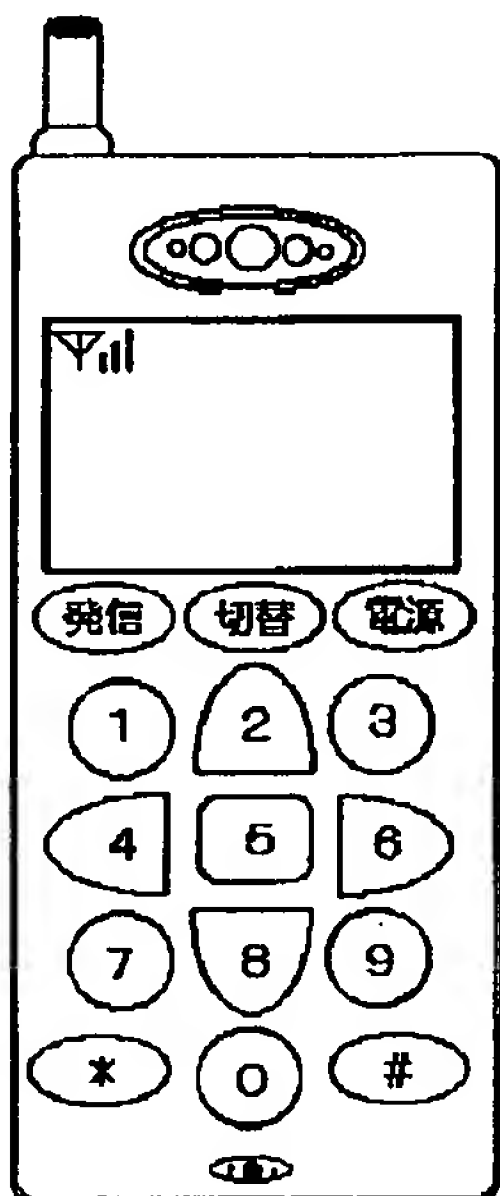
[Drawing 1]

図 1



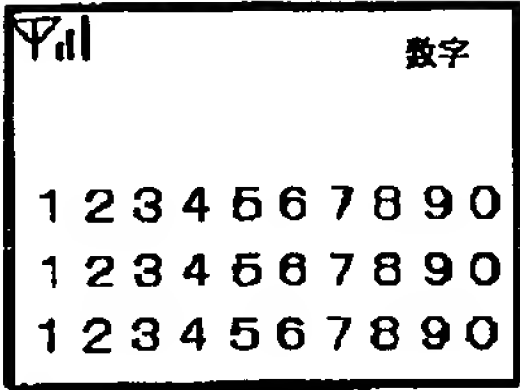
[Drawing 2]

図 2

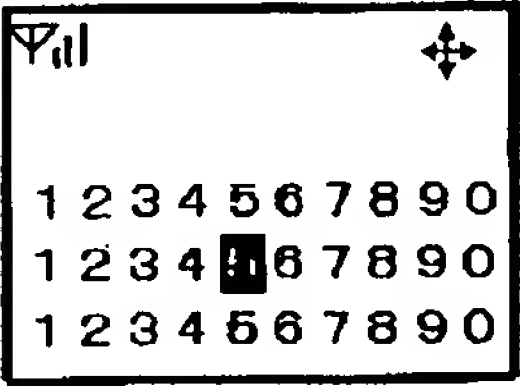


[Drawing 3]

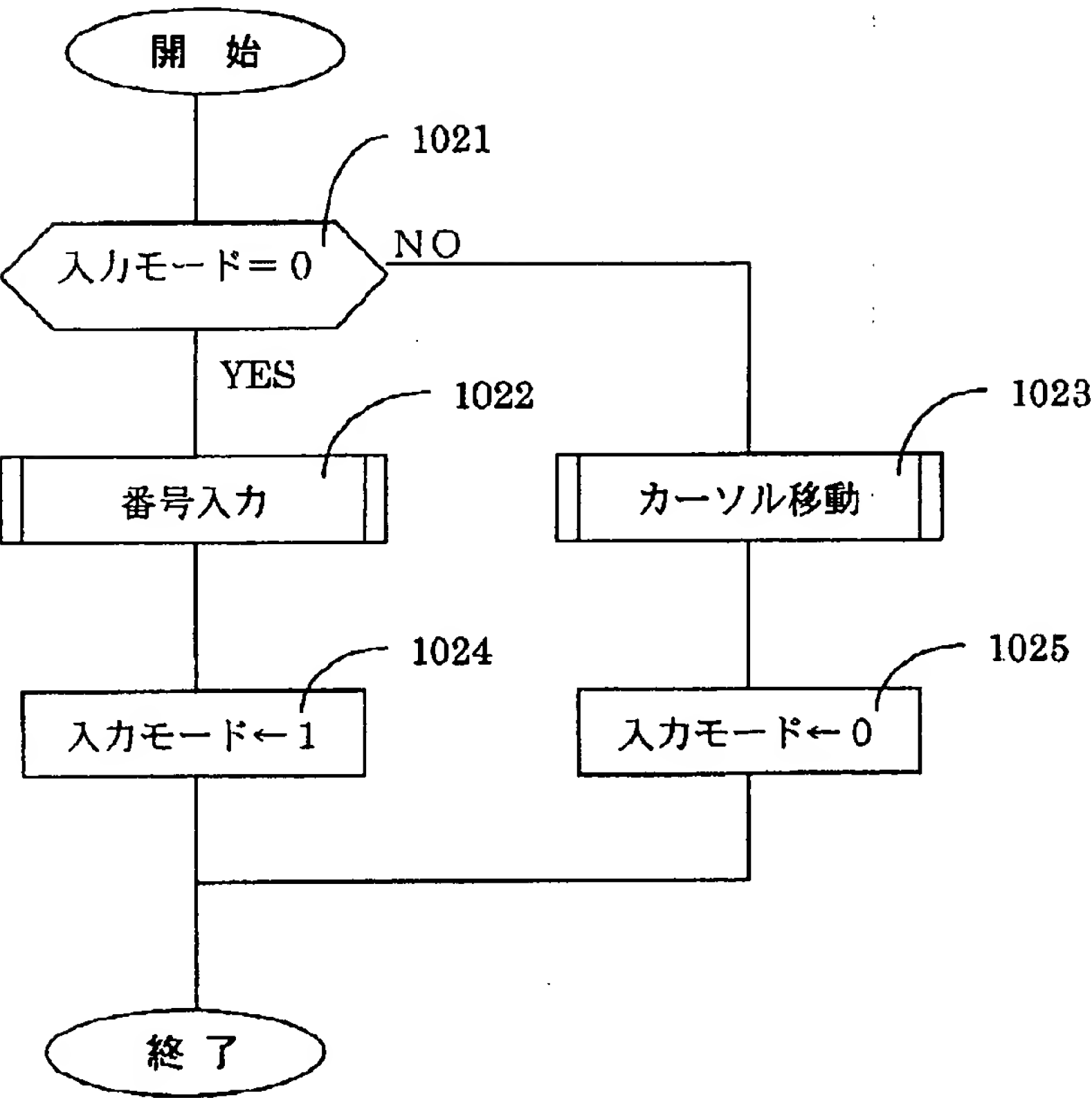
図 3



[Drawing 4]
図 4

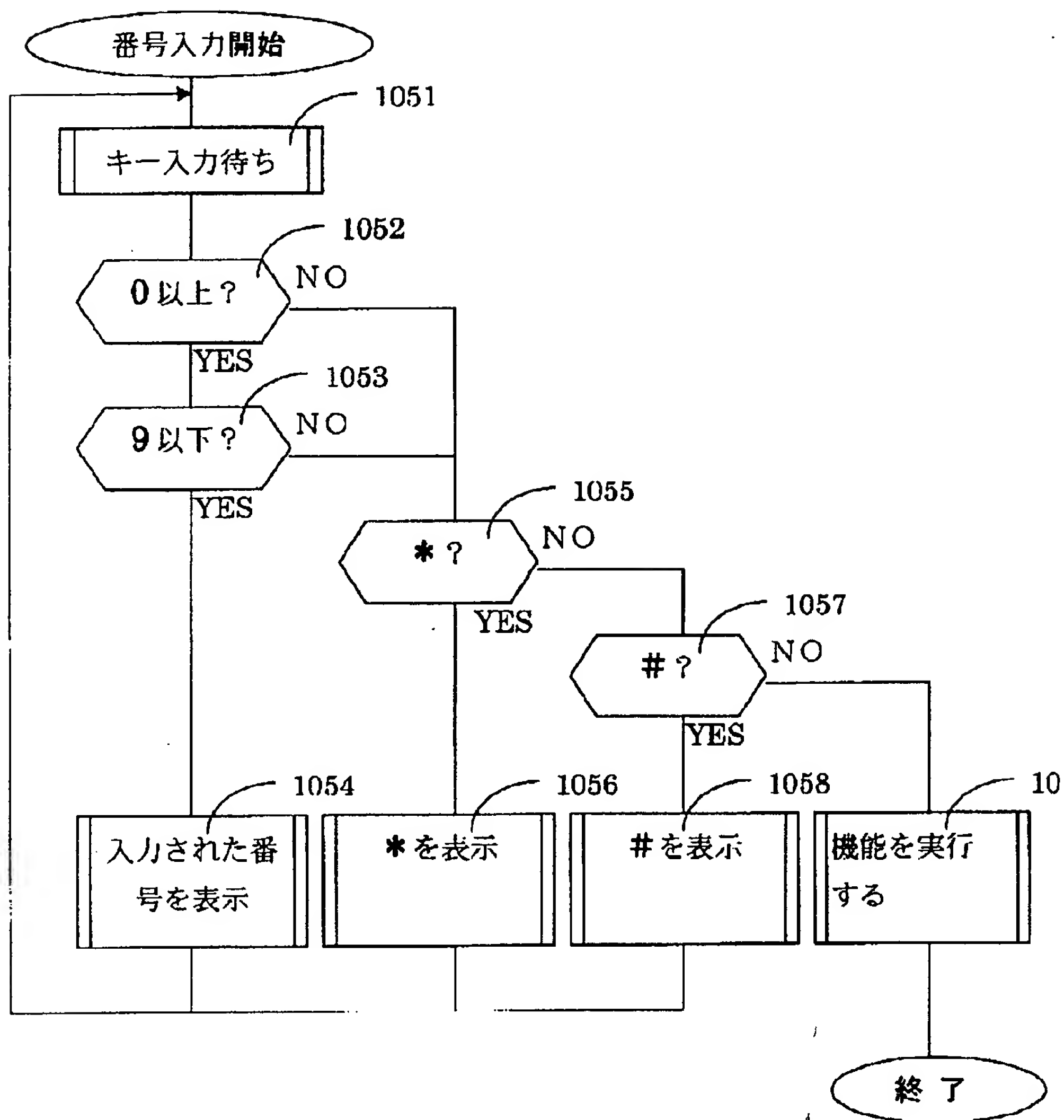


[Drawing 5]
図 5



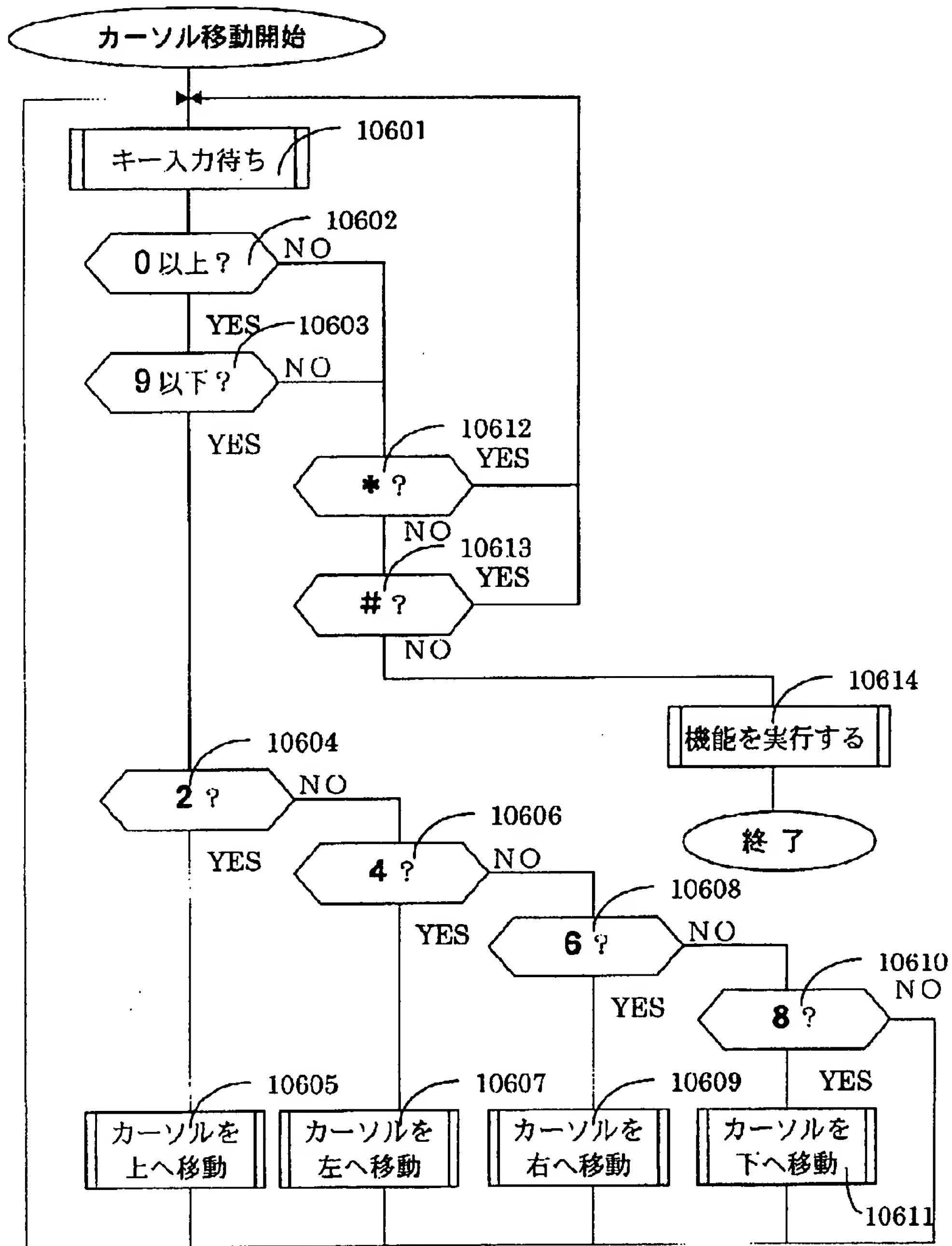
[Drawing 6]

図 6



[Drawing 7]

図 7



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CORRECTION OR AMENDMENT

[Kind of official gazette] Printing of amendment by the convention of 2 of Article 17 of Patent Law
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[Application number] Japanese Patent Application No. 10-160199
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[FI]

H04M 1/23 Z
G06F 3/02 320 H
H04M 1/274

[Procedure revision]
[Filing Date] March 3, Heisei 16 (2004. 3.3)
[Procedure amendment 1]
[Document to be Amended] Specification
[Item(s) to be Amended] Claim
[Method of Amendment] Modification
[The contents of amendment]
[Claim(s)]
[Claim 1]

Telephone characterized by having a means to input a number, and the means which changes the means to which cursor is moved in the telephone which has a means to input a number, and the means to which cursor is moved.

[Claim 2]

The portable telephone characterized by using as the same key the key which inputs a number, and the key to which cursor is moved in the portable telephone which has the key which inputs a number, and the key to which cursor is moved.

[Translation done.]